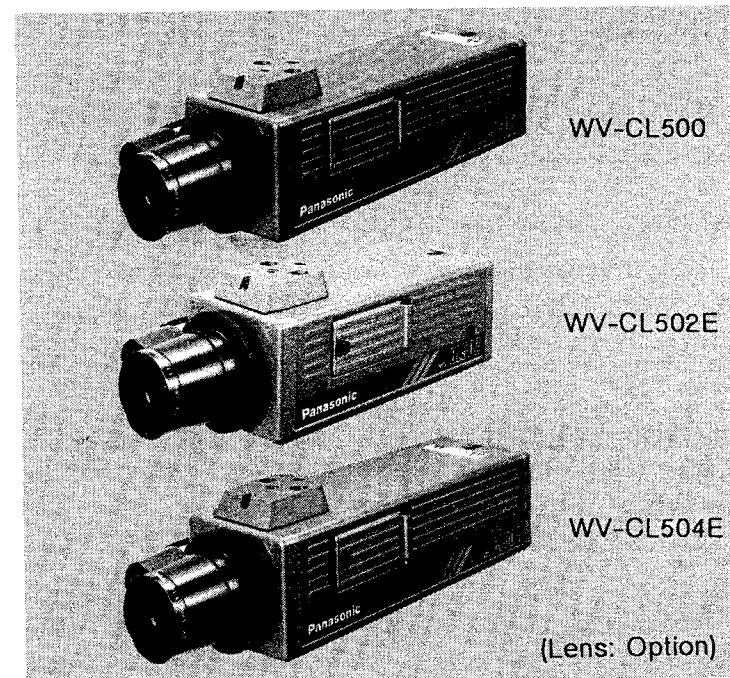


Operating Instructions

Colour CCTV Cameras
WV-CL500, WV-CL502E, WV-CL504E



Panasonic

Before attempting to connect or operate this product, please read these instructions completely.

ENGLISH

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ENGLISH VERSION

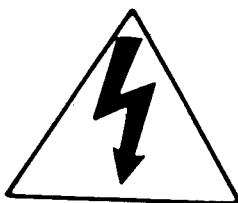


CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

For WV-CL500/B For U.K.

**PLEASE READ FOLLOWING INSTRUCTION
IF YOUR POWER SOURCE VOLTAGE IS MORE THAN 200V.**

WARNING

**THIS APPARATUS MUST BE EARTHED.
IMPORTANT**

The wires in this mains lead are coloured in accordance with the following code.

Green-and-yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows.

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol $\perp$ or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

This model conforms to the EC directive (for radio interference) 87/308/EEC.

This apparatus was produced to BS 800:1987.

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The serial number of this product may be found on the bottom of the unit.

You should note the serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid identification in the event of theft.

Model No. _____

Serial No. _____

..... For WV-CL500/A For Australia

THIS APPARATUS MUST BE EARTHED.

To ensure safe operation the three-pin plug supplied must be inserted only into a standard three-pin power point which is effectively earthed through the normal household wiring. Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth. Wrongly wired extension cords are a major cause of fatalities.

The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe. For your safety, if in any doubt about the effective earthing of the power point, consult a qualified electrician.

PREFACE

A single, CCD chip is employed in the Panasonic WV-CL500/WV-CL502E/WV-CL504E colour CCTV camera to provide a wide array of benefits to the user.

Since the charge coupled device (CCD) image sensor eliminates bulky tubes, the camera is extremely compact and lightweight.

The CCD camera has superb resistance to burn-in, introduces no geometric distortion, is not affected by magnetic fields, has long life, and is highly resistant to damage from vibration and shock.

This camera has been specially designed for surveillance, security, and observation of special and dangerous locations where a compact, lightweight, highly reliable camera is needed.

FEATURES

1. Utilizing a 1/2-inch high resolution interline CCD image sensor (681 (H) × 582 (V) effective pixels)
2. Variable strobe effect shutter of 1/250, 1/500 or 1/1,000 second.
3. 410 lines of horizontal resolution.
4. 10 lux of minimum scene illumination at F1.4.
5. Either optional standard C-mount or special C-mount (CS mount) Auto Iris control lens can be used.
6. Selectable internal sync (INT) or line-lock sync (LL) mode for WV-CL500/WV-CL504E.
7. Vertical Phase Control for Line-lock sync (LL) mode.
8. External sync capability with a composite sync, composite video signal or black burst signal.
9. Horizontal Phase and Subcarrier Phase Control for Gen-lock.
10. Selectable automatic gain control (AGC) ON. (Max. gain up; approx. 12 dB) or OFF.
11. Selectable Auto Iris Control signal for the lens either a video signal or DC control signal.
12. Selectable automatic tracing white-balance (AUTO) for through the lens (TTL) type or automatic white-balance control (LOCK).

PRECAUTIONS

1. Do not attempt to disassemble the camera.

To prevent electric shock, do not remove screws or cover. There are no user-serviceable parts inside. Refer servicing to qualified service personnel.

2. Handle the camera with care.

Do not abuse the camera. Avoid striking and shaking it. The camera could be damaged by improper handling storage.

3. Do not expose the camera to rain or moisture, avoid operation in wet areas.

Take immediate action if the camera should become wet.

Turn power off and request servicing to qualified service personnel. Moisture can damage the camera and also create the danger of electric shock.

4. Never aim the camera at the sun.

Whether the camera is in used or not, never aim it at the sun or other extremely bright object.

5. Do not use the camera beyond its temperature, humidity or power source ratings.

(a) Designed for indoor use.

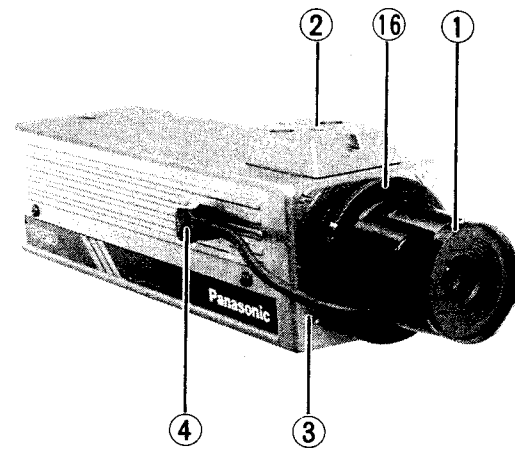
Ambient temperature must not range beyond $-10^{\circ}\text{C} - +50^{\circ}\text{C}$.

(b) Avoid using the camera when humidity is above 90%.

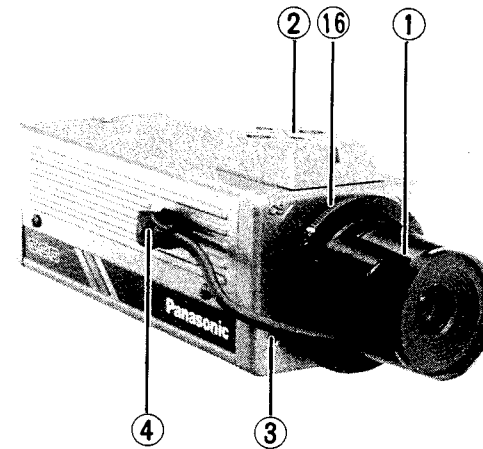
(c) The input power source is 240V AC 50Hz for WV-CL500/A and WV-CL500/B, 220V AC 50Hz for WV-CL500/G, 12V DC for WV-CL502E and 24V AC 50Hz for WV-CL504E.

MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS

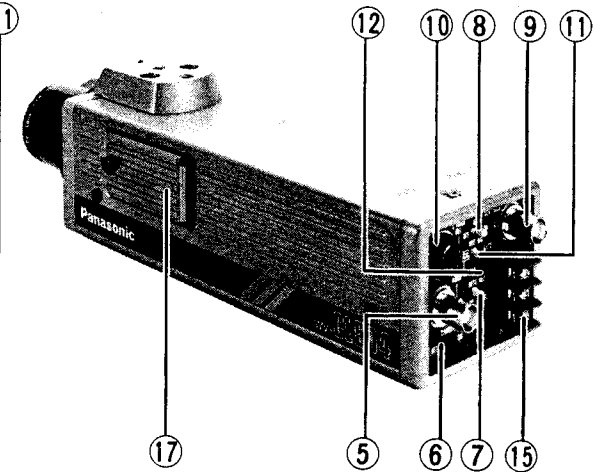
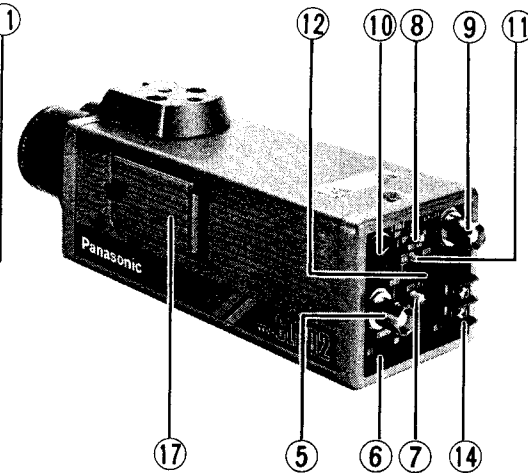
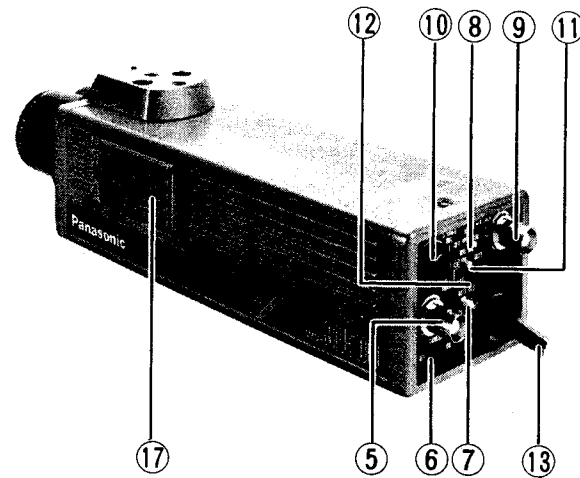
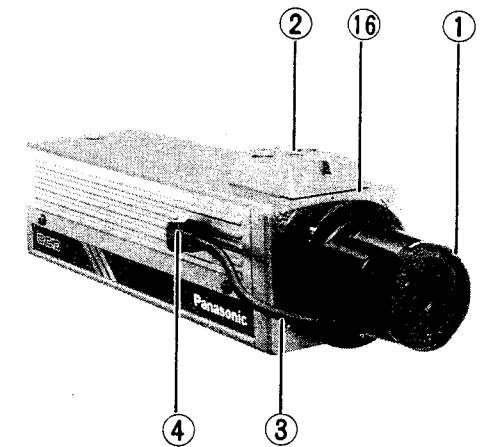
WV-CL500



WV-CL502E



WV-CL504E



- 1 Automatic Iris Lens (Option)**
- 2 Camera Mounting Screw Hole**
This threaded hole (1/4" - 20) is used to mount the camera onto a mounting bracket or tripod.
- 3 Power Indicator**
- 4 Auto Iris Lens Connector**
Supplies the power and either the video signal or DC control signal selected by the Lens Selection Switch (7) to the Auto Iris Lens.
The 4-pin connector for the lens which originally has different type of connector is a standard accessory (Part No. YFE4191J100).
- 5 Video Output Connector (VIDEO)**
A composite video signal is provided at this connector.
- 6 Camera ON/OFF Switch**
- 7 Lens Selection Switch (AUTO IRIS, DC/VIDEO)**
This switch is used to select the supplied auto iris control signal to the lens from the Auto Iris Lens Connector (4).

DC:

Choose this position when the auto iris control lens requiring DC control signal such as WV-LA4.5, WV-LA6, WV-LA12, WV-LA18, WV-LA36, WV-LZ81/6, etc., is mounted on the camera.

VIDEO:

Choose this position when the auto iris control lens requiring video signal such as WV-LA8B, WV-LA16B, WV-LA25B, WV-LA50B etc., is mounted on the camera.

8 AGC ON/OFF Switch (AGC, ON/OFF)

This switch is used to select the gain of the video amplifier as follows ;

ON:

When the lens iris is fully open at low light shooting, a clear picture is obtained by automatic increase of the gain.

OFF:

A natural and low-noise picture is obtained at low light shooting.

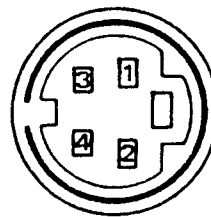
9 Gen-Lock Video Input Connector (GEN LOCK)

A composite B/W or colour, 1.0Vp-p/75 ohms video signal, or black burst 0.3Vp-p/75 ohms or composite sync, 4Vp-p/75 ohms should be supplied to this connector for external synchronization.

10 S-Video Output Connector (S-VIDEO OUT)

The luminance (Y) and chrome (C) signals for S-VHS VTR or monitor are provided at this connector.

No.	CONTENTS
1	Y Ground
2	C Ground
3	Y Signal Output
4	C Signal Output



S-VIDEO OUT (female)

**11 White Balance Selection Switch
(WHT BAL, AUTO/LOCK)**

The white balance setting can be selected as;

AUTO:

The white balance can automatically be set by tracing the characteristic/colour temperature of light source. Even if the characteristic/colour temperature of light source changes during the shooting, the white balance is kept properly.

Note:

1. It is recommended to use the AUTO position when the colour temperature of light would vary during shooting.
2. It is recommended to use the LOCK position in the following conditions.
 - o Under fluorescent lamp
 - o Colour temperature does not vary
 - o More accurate white balance control is required.

LOCK:

The white balance can be set by pressing the White Set Button (SET) (12) while aiming the camera at the white object such as white wall or paper.

More accurate white balance can be achieved at this position. However, when the colour temperature of light source changes, the white balance must be reset by pressing the White Set Button (SET) (12) while aiming the camera at the white object.

12 White Set Button

In case the White Balance Selection Switch (11) is set to LOCK position, the white balance can be set by pressing this button while aiming the camera at the white object.

The white balance setting is required whenever the lighting condition is changed.

Note:

It may not be proper to use the LOCK position in the following conditions.

- o Under coloured illumination
- o No white object is available

13 Power Cord (For WV-CL500)

14 DC 12V IN Terminal Strip (DC 12V) (For WV-CL502E)

This terminal accepts DC 12V power source (10.8 - 16V).

Caution:

To Prevent fire or shock hazard, the UL listed wire VW-1, style 1007 should be used for the cable for DC 12V Input Terminal.

15 AC 24V In Terminal Strip (AC 24V) (For WV-CL504E)

Accepts AC 24V power source (19.5V - 28V).

Be sure to connect grounding lead to the GND terminal.

Caution:

To Prevent fire or shock hazard, the UL listed wire VW-1, style 1007 should be used for the cable for AC 24V Input Terminal.

16 Flange-back Adjusting Ring

Used to adjust the back focus or picture focus by rotating this ring to clockwise for C-mount lens or counterclockwise for special C-mount (CS mount) lens.

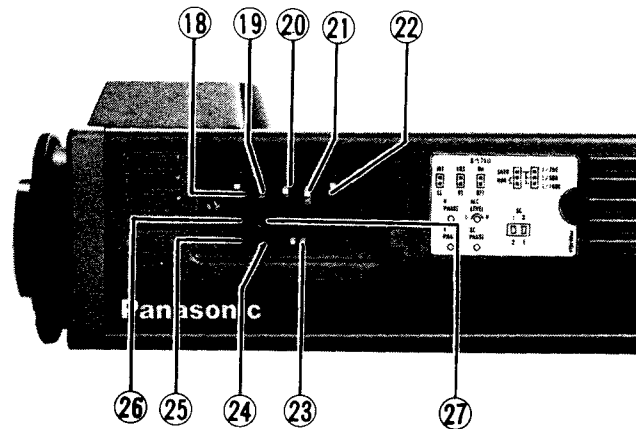
CAUTION:

1. Always set this ring to fully clockwise before mounting the lens.
2. Do not turn this ring too much to counterclockwise when the C-mount lens is mounted as this could damage the inner glass CCD image sensor.

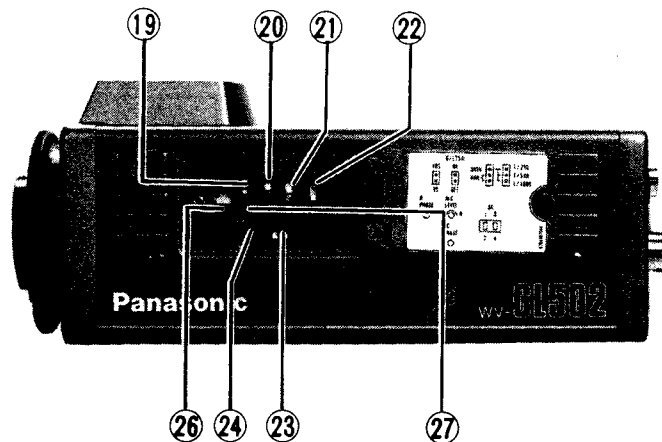
17 Operation Panel Cover

Inside of Operation Panel

(For WV-CL500 and WV-CL504E)



(For WV-CL502E)



18 Sync Selection Switch (INT/LL)

(For WV-CL500 and WV-CL504E)

This switch is used to select the camera synchronization mode.

INT:

When no signal is supplied to the GEN LOCK connector, the camera synchronization mode is set to internal 2 : 1 interlace.

Whenever the GEN LOCK video signal is supplied to the GEN LOCK connector, the camera synchronization mode is automatically set to external synchronization.

LL:

The camera synchronization mode is set to Line-Lock even if the GEN LOCK video signal is supplied to the GEN LOCK connector.

Note: Set this switch to INT position for Gen-Lock operation.

19 Gen-Lock Signal Selection Switch (VBS/VS)

This switch is used to select the Gen-Lock input signal as follows:

VBS (Video, Burst, Sync):

When the Gen-Lock input signal is a black burst signal or composite colour video signal, set this switch to the VBS position.

The horizontal, vertical scanning and subcarrier phase are locked to that of the Gen-Lock input signal.

VS (Video, Sync):

When the Gen-Lock input signal is a black and white composite video signal or composite sync signal, set this switch to VS position. The horizontal and vertical scanning are locked to that of the Gen-Lock input signal while the internal subcarrier signal is used for the burst and chroma signal.

20 Gen-Lock Termination Switch

(G/L 75 ohms, ON/OFF)

When looping through the Gen-Lock video input signal, set this switch to OFF position and all other cases, set this to ON position.

21 Camera Mode Selection Switch

(SHTR/NOR)

This switch is used to select the camera mode among the SHTR (Strobe Effect Shutter), NOR (Normal).

SHTR:

The strobe effect shutter mode is enabled and the shutter speed can be chosen among 1/250 sec., 1/500 sec. and 1/1,000 sec. by the Shutter Speed Selection Switch (22).

NOR:

A normal mode is selected.

Notes:

1. The Gen-Lock input signal should be specified as CCIR standard in order to maintain the proper electronic sensitivity up operation.
2. There are three positions on this switch. However, the middle and the lower positions are the same NOR-mode.

22 Shutter Speed Selection Switch

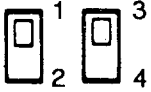
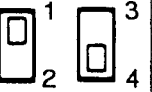
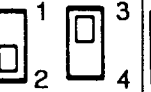
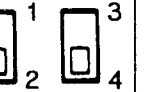
(1/250, 1/500, 1/1000)

This switch selects the speed of the electronic shutter, which can be 1/250 sec, 1/500 sec or 1/1,000 sec.

23 Subcarrier Phase Coarse Switches (SC, 1/2/3/4)

The subcarrier phase of the camera signal can be adjusted from 0° to 360° in 90° steps with these switches, as shown below, for matching the phase of the subcarrier signal at the Gen-Lock Input connector (9).

These switches should be set when the camera is used in a system configuration with the Special Effects Generator.

Subcarrier Phase	0°	90°	180°	270°
Position of Switches				

24 Subcarrier Phase Fine Control (SC PHASE)

This control allows fine adjustment of the subcarrier phase set by the Subcarrier Phase Coarse Switches (23). The control allows continuous control of up to +90° subcarrier phase to match the phase of the subcarrier signal obtained at the Gen-Lock Input connector (9).

This control should be adjusted together with the Subcarrier Phase Coarse switches (23) when the camera is used in a system configuration including the Special Effects Generator.

25 Vertical Phase Control (V PHASE) (For WV-CL500 and WV-CL504E)

The vertical phase of the camera signal can be adjusted to match the vertical phase of the power line at the power Cord (13) or AC 24V In Terminal Strip (15).

26 Horizontal Phase Control (H PHASE)

The horizontal phase of the camera signal can be adjusted to match the horizontal phase of the signal at the Gen-Lock Video Input Connector (9).

27 Auto Iris Level Control (ALC LEVEL, L (low)/H (High))

This control adjusts the control level of the auto iris control when the lens selection switch (7) is set to the DC position and the auto iris lens which requires the DC control voltage such as WV-LA12 etc., is mounted on the camera.

Note: Adjust this control while setting the AGC ON/OFF Switch (8) to OFF position.

CONNECTION

Power Cable

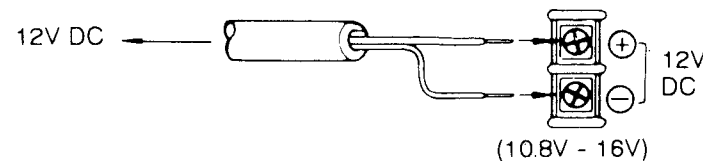
Keep the camera power switched off during installation.

A: WV-CL500

1. Connect the AC Power Cord (13) to a 50Hz electrical outlet 240V AC for WV-CL500/A and WV-CL500/B, 220V AC for WV-CL500/G.

B: WV-CL502E

1. A power supply of 12V DC is required.
2. Connect the power cable to the 12C DC Power Terminal Strip (14) on the rear panel of the camera. Be careful not to obstruct the operation of camera ON/OFF switch.



Resistance of copper wire at 20°C

Copper wire size (AWG)	#24 (0.22mm ²)	#22 (0.33mm ²)	#20 (0.52mm ²)	#18 (0.83mm ²)
Resistance ohms/m	0.078	0.050	0.030	0.018

- Calculation method of maximum cable length between camera and power supply.

$$16V\ DC > V_A - (R \times 0.55 \times L) > 10.8V\ DC$$

L: Cable length (Meter)

R: Resistance of copper wire (Ω/m)

V_A: DC voltage of power supply

$$L\ standard = \frac{V_A - 12}{0.55 \times R} \text{ (Meter)}$$

$$L\ minimum = \frac{V_A - 16}{0.55 \times R} \text{ (Meter)}$$

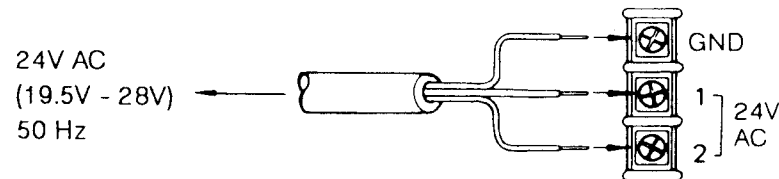
$$L\ maximum = \frac{V_A - 10.8}{0.55 \times R} \text{ (Meter)}$$

Caution:

To Prevent fire or shock hazard, the UL listed wire VW-1, style 1007 should be used for the cable for DC 12V Input Terminal.

C: WV-CL504E

1. A power supply of 24V 50Hz is required.
2. Connect the power cable to the 24V in Terminal Strip (12) on the rear panel of the camera.



Recommended wire guage size for 24V AC line.

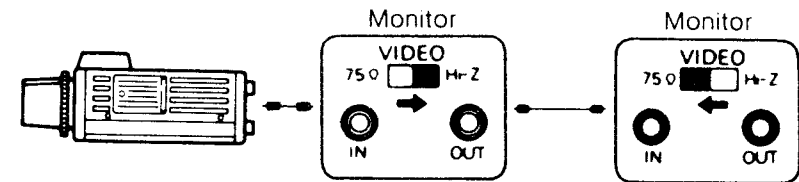
Copper wire size (AWG)	#24 (0.22mm ²)	#22 (0.33mm ²)	#20 (0.52mm ²)	#18 (0.83mm ²)
Length of Cable (Approx.) [m]	110	180	270	450

Caution:

To Prevent fire or shock hazard, the UL listed wire VW-1, style 1007 should be used for the cable for AC 24V Input Terminal.

Video Cable

1. Use a video monitor whose resolution is at least equal to the camera's.
2. Terminate the camera output with 75-ohm resistor at the furthest end of its cable run.
 - A. Use 75-ohms coaxial cable. (RG-59/U, RG-6/U, RG-11/U, RG- 15/U)
 - B. Always set the last monitor's termination switch to 75 ohms, and set the termination switches of intermediate monitors to HIGH (HI-Z).



- C. The maximum extensible coaxial cable length between the camera and the monitor is shown in the table 1. Since cable quality varies among manufacturers, please verify video quality before final installation, if maximum lengths are to be used.

Table 1

Type of coaxial cable		RG-59/U (3C-2V)	RG-6U (5C-2V)	RG-11/U (7C-2V)	RG-15/U (10C-2V)
Recommended Maximum cable length	(ft) (m)	825 250	1,650 500	1,980 600	2,640 800

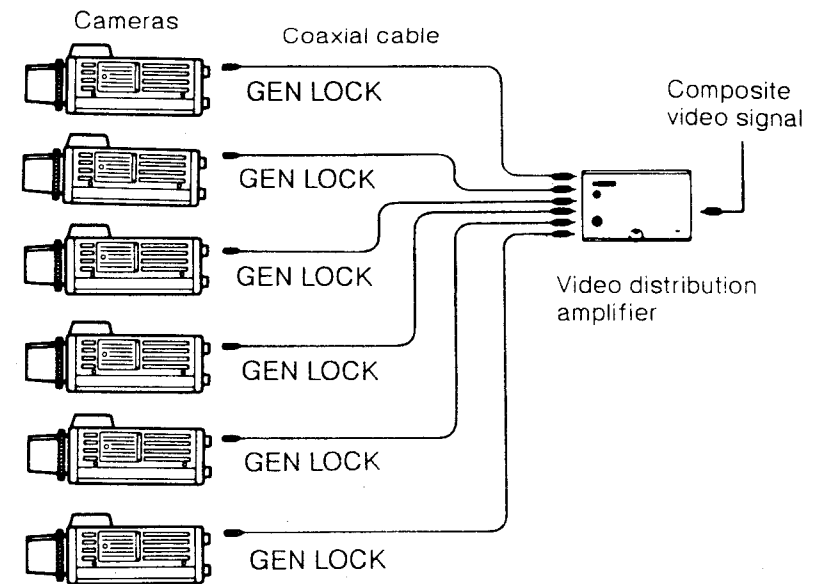
3. Wiring precautions:

- o Do not bend coaxial cable into a curve whose radius is smaller than 10 times the cables diameter.
- o Never staple the cable - not even with circular staples. Mismatching will occur.
- o Never crush or pinch the cable.

All these will change the impedance of the cable and cause poor picture quality.

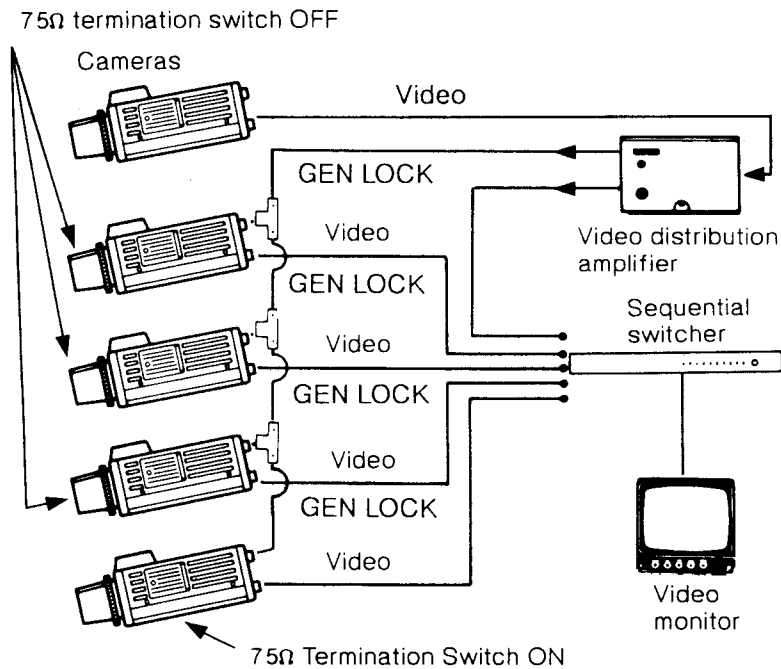
Gen-Lock Video Cable

1. Connect the coaxial cable for Gen-Lock video signal between the Gen-Lock Video Input connector (9) and the reference composite video output (B/W or colour) (1.0Vp-p/75 ohms) or composite sync (4Vp-p/75 ohms) or black burst (0.3Vp-p/75 ohms) of the production system.



- The Gen-Lock Termination Switch (20) of all cameras should be set to ON position.

o Gen-Lock (Looping through)



- The Gen-Lock Termination Switch (20) of the furthest camera should be set to ON position and that of all other cameras should be set to OFF position.
Note: The Gen-Lock input signal should meet with CCIR standard and should not contain jitter such as VTR playback signal.

LENSES

1. Selection of Lens

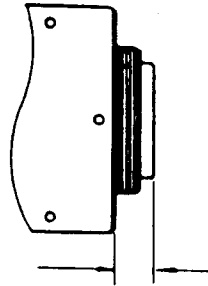
It is recommended to use the following Auto Iris Control Lens.

Models		WV-LA2.8 (Wide)	WV-LA4.5 (Wide)	WV-LA6 (Wide)	WV-LA12 (Standard)	WV-LA18 (Telephoto)	WV-LA36 (Telephoto)	WV-LZ81/6 (Motorized Zoom)
Specifications								
Focal Length		2.8mm	4.5mm	6mm	12mm	18mm	36mm	8.5 – 51mm (6x)
Maximum Aperture Ratio		1:1.4	1:1.4	1:1.4	1:1.4	1:1.4	1:1.8	F=1:1.2(wide) - 1:1.3(tele)
Automatic Light Compensation		1:2000	1:2000	1:2000	1:2000	1:4000	1:2400	—
Image Size		6.4mm x 4.8mm (equivalent to 1/2" pick-tube)						
Angular Field of View	H	107° 17'	70° 1'	54° 75'	29°	20° 36'	10° 13'	7° 14' (tele) 41° 56' (wide)
	V	88° 4'	55° 6'	42° 45'	21° 59'	15° 22'	7° 39'	5° 28' (tele) 31° 19' (wide)
Minimum Object Distance (ft)		Adjust by Camera	0.92(0.3m)			0.89(0.27m)	3.3 (1m)	
Optional Filter Size		None ϕ 37.5 P=0.5						ϕ 49mm P=0.75mm
Mount		Special C-mount (CS mount, 1" - 32UN)						
Weight (lbs)		0.14 (65g)	0.17 (75g)	0.17 (75g)	0.14 (65g)	0.15 (70g)	0.18 (80g)	0.92 (420g)
Dimensions		ϕ 1-11/16" x 1-5/16" (ϕ 43x34mm)	ϕ 1-11/16" x 1-5/8" (ϕ 43 x 41)					3-3/8"(W) x 2.7/16"(H) x 3-7/8" (D) 85(W)x62(H)x99(D)mm
Focus Control	Far	—						+6V DC Max. 24mA 4sec
	Near	—						−6V DC Max. 24mA 4sec
Zoom Control	Wide	—						+6V DC Max. 24mA 6sec
	Tele	—						−6V DC Max. 24mA 6sec
Iris Range		—						F1.2 – F22, Close

Dimensions and weight indicated are approximate.
Specifications are subject to change without notice.

When you use the lens other than listed on page 14, lens mount should be C-mount or special C-mount (CS-mount (1"-32UN)) and lens weight should be less than 420g.

The protrusion of the rear of the lens should be as shown below.



C-mount : Less than 9 mm

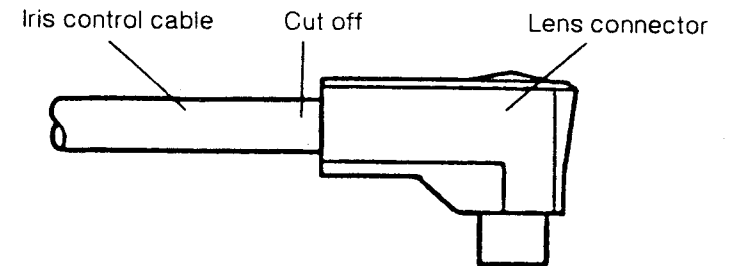
CS mount : Less than 4 mm

2. Installation of Auto Iris Lens Connector

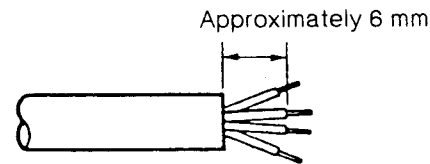
When you use the Auto Iris Lens other than listed on page 14, install the lens connector (YFE4191J100) coming with the camera as follows.

The following installation should be made by qualified service personnel or system installers.

- (1) Cut off the iris control cable at the edge of lens connector and then cut off the outer cable cover as shown in the diagram.



- (2) Cut off the inner cable covers of the iris control cable as shown in the diagram.



- (3) Put the heat shrinkable tubes or equivalent tubes on the inner cables of the iris control cable.
- (4) Solder the inner cables of the iris control cable at the pin-plug block according to the following pin assignment and cover the heat shrinkable tubes or equivalent tubes at soldered area and the heat on the tubes to shrink.

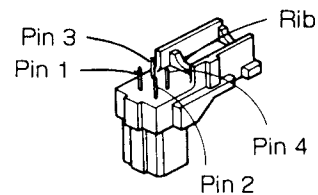
Pin 1: Power source; +6V DC, 50mA Max.

Pin 2: Not used

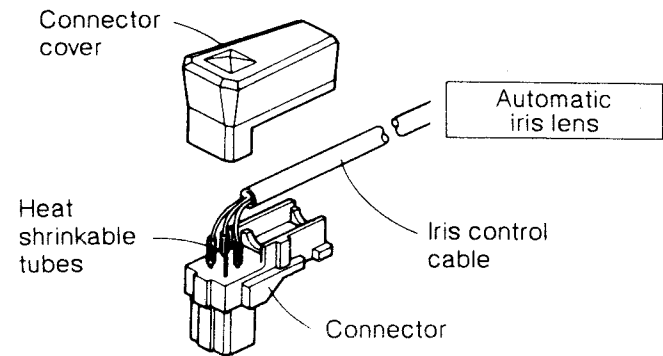
Pin 3: Video signal; 0.7Vp-p/40 kohms

Pin 4: Shield, ground

(When the Lens Selection Switch (7) is set to the VIDEO position)



- (5) Both the connector cover and connector should be positioned to interlock.



Note:

Cut off the rib on the connector, when the iris control cable is thick and the connector cover and connector can not locked.

3. Mounting the Lens

CAUTION:

Always set the Flange-back Adjusting Ring to fully clockwise by loosening the screw on the ring before mounting the lens otherwise the inner glass and CCD image sensor could be damaged by the lens.

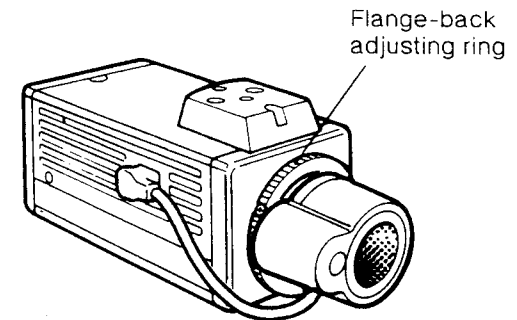
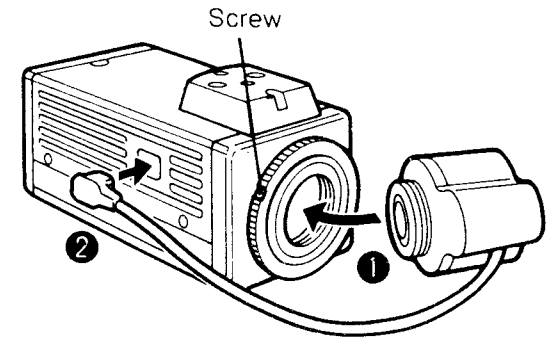
- (1) Mount the lens by turning it clockwise onto the lens mount of the camera.
- (2) Connect the lens cable to the Auto Iris Lens Connector on the camera when the Auto Iris Lens is used.
- (3) Set the Lens Selection Switch (7) to the proper position as follows.

DC:

The mounted lens is one of the listed on page 14 or the one requires the DC control signal for auto iris control.

VIDEO:

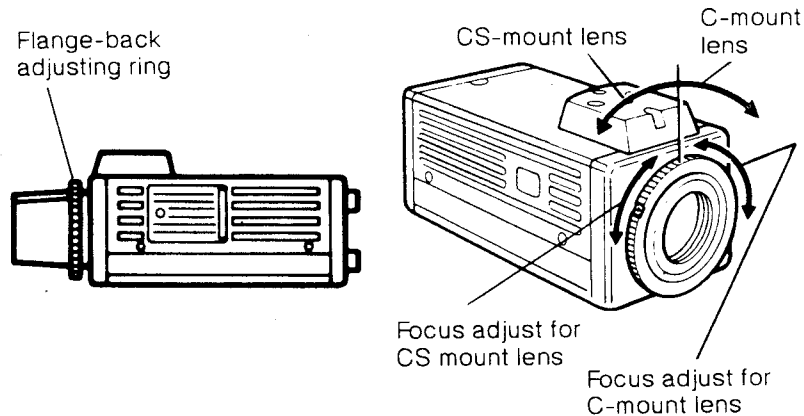
The mounted lens requires video signal for auto iris control.



FOCUS OR FLANGE-BACK ADJUSTMENT

The following adjustment should be made by qualified service personnel or system installers.

1. Loosen the screw on the Flange-back Adjusting Ring.



2. Turn the Flange-back Adjusting Ring to the desired position.

CAUTION:

Do not turn this ring counterclockwise too much as this could damage the inner glass and CCD image sensor.

3. Tighten the screw on the Flange-back Adjusting Ring.

PRECAUTION OF FLICKER

When the camera is aimed at objects which are illuminated by fluorescent lamp, picture may have flicker.

INSTALLATION OF CAMERA

o Mounting at top

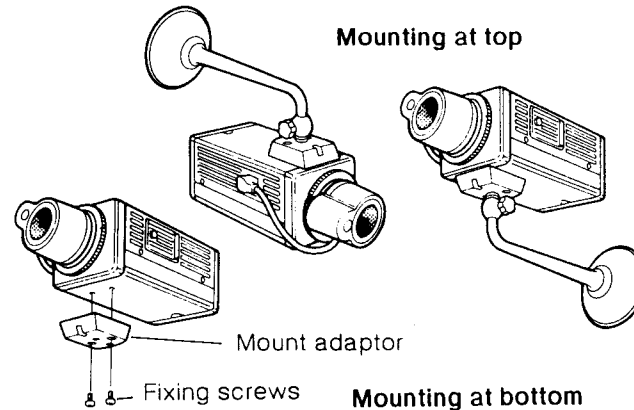
This camera is originally designed to be mounted from the top, as shown. The hole is the standard photographic pan-head screw size (1/4" - 20).

o Mounting at bottom

Remove the mount adaptor on the top of the camera by removing two fixing screws.

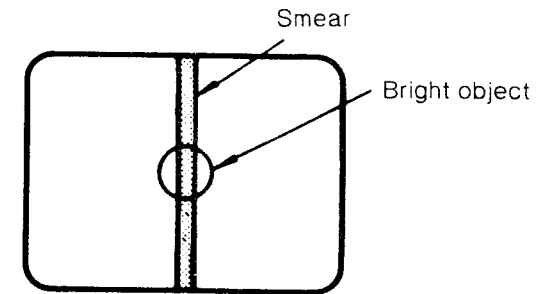
Attach the mount adaptor to the bottom as shown in the diagram, then mount the camera on the mounting bracket.

Make sure that the two original screw are used when mounting the mount adaptor; longer type screws will break the inner component.



PREVENTION OF BLOOMING AND SMEAR

When the camera is aimed toward spot lights or other bright lights and light reflecting objects. A vertical stripe (smear) or blooming may appear therefore the camera should be operated carefully in the vicinity of extremely bright objects to avoid the vertical stripe (smear) or blooming.



EXTERNAL SYNC SIGNAL

When the camera is used with non-standard external sync, the camera synchronization may be lost. Therefore the external sync signal should be specified as CCIR standard.

SPECIFICATIONS

Pick-up Device:	681 (H) × 582 (V) pixels, Interline Transfer CCD with colour filter
Scanning Area:	6.4(H) × 4.8 (V) mm ² (1/2-inch Image size)
Scanning:	625 Lines/50 Fields/25 Frames
Horizontal:	15.625 KHz
Vertical:	50 Hz
Synchronization:	Internal or external switchable automatically at INT position Line-locked sync at LL position External Input: 1.0Vp-p/75 ohms composite video signal (GEN LOCK)
Resolution (Normal):	410 lines (Horizontal) 400 lines (Vertical)
Signal to Noise Ratio:	44dB (Typical at lens capped and AGC OFF)
Minimum Illumination:	1 footcandles (10 Lux) at F1.4, AGC ON
AGC:	Selectable ON (12dB) or OFF
Lens Mount:	C-mount or Special C-mount (CS-mount)
Strobe Effect Shutter:	Selectable Shutter Speed for 1/250 sec, 1/500 sec, or 1/1,000 sec.
Connectors:	VIDEO OUT: 1Vp-p/75 ohms, composite signal GEN LOCK IN: 1Vp-p/75 ohms, composite video, 0.3Vp-p/75 ohms black burst or 4Vp-p/75 ohms, composite sync. S-VIDEO OUT: Y signal = 1.0Vp-p, C signal = 0.3Vp-p, 75 ohms Mini DIN 4P connector
Switches:	AGC ON/OFF Switch, AUTO IRIS, DC/VIDEO Switch, SYNC, INT/LL Switch (WV-CL500 and WV-CL504E) GEN LOCK, VBS/VS Switch, GEN LOCK 75 ohms ON/OFF Switch, CAMERA MODE (SHTR/NOR) Switch, Shutter Speed Selection Switch, Subcarrier Phase Coarse Selection Switch

Controls:	H-PHASE Control ($-0.1\mu\text{S} - +2.5\mu\text{S}$) V-PHASE Control (330°) ALC LEVEL Control Subcarrier Phase Fine Control
Ambient Temperature:	$-10^\circ\text{C} - +50^\circ\text{C}$
Power Source:	WV-CL500/A and WV-CL500/B: 240V AC, 50Hz WV-CL500/G: 220V AC 50Hz WV-CL502E: 12V DC WV-CL504E: 24V AC, 50Hz
Power Consumption:	WV-CL500/A and WV-CL500/B: 8.5W (at 240V AC) WV-CL500/G: 8.5W (at 220V AC) WV-CL502E: 550mA (at 12V DC) WV-CL504E: 8.5W (at 24V AC)
Dimensions (without lens):	WV-CL500/A/B/G, WV-CL504E: 70(W) $\times$ 70.5(H) $\times$ 205(D)mm WV-CL502E: 70(W) $\times$ 70.5(H) $\times$ 166 (D)mm
Weights:	WV-CL500/A/B/G: 1.19kg WV-CL502E: 830g WV-CL504E: 1.06kg

Weights and dimensions indicated are approximate.
Specifications are subject to change without notice.

Standard Accessories

o ALC Lens Connector (YFE4191J100) 1pc
o Body Cap 1pc

Optional Accessories

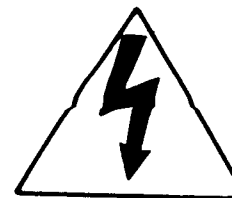
o Lens:

WV-LA2.8
WV-LA4.5
WV-LA6
WV-LA12
WV-LA18
WV-LA36
WV-LZ81/6

DEUTSCHE AUSGABE
(GERMAN VERSION)



Das Ausrufezeichen im gleichseitigen Dreieck soll den Benutzer auf wichtige Bedienungs- und Wartungsanweisungen in den Unterlagen hinweisen, die dem Gerät beiliegen.



Das Blitzzeichen mit Pfeil im gleichseitigen Dreieck soll den Benutzer auf das Vorhandensein von nichtisolierter "gefährlicher Spannung" innerhalb des Gehäuses hinweisen, die so groß sein kann, daß sie Gefahr eines elektrischen Schlags darstellt.

Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, daß der/die/das

CCTV Kamera WV-CL700/G

(Gerät, Typ, Bezeichnung)

In Übereinstimmung mit den Bestimmungen der

VFG 1046/1984

(Amtsblattverfügung)

funkentstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

Panasonic Deutschland GmbH

Name des Herstellers/Importeurs

Dieses Modell entspricht der EG-Vorschrift (für Funkstörungsschutz) 87/308/EG.

WARNUNG: UM DIE GEFAHR VON BRAND ODER STROMSCHLAG ZU VERHÜTEN, DIESES GERÄT WEDER REGEN NOCH FEUCHTIGKEIT AUSSETZEN.